

SEQUENCE LISTING

(1) GENERAL INFORMATION:

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(ii) TITLE OF INVENTION: Enzymatic Array and Process of Making Same

(iii) NUMBER OF SEQUENCES: 29

- (iv) COMPUTER READABLE FORM:  
    (A) MEDIUM TYPE: Floppy disk  
    (B) COMPUTER: IBM PC compatible  
    (C) OPERATING SYSTEM: PC-DOS/MS-DOS  
    (D) SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
- (v) CURRENT APPLICATION DATA:  
    APPLICATION NUMBER: US 08/559,968
- (vi) PRIOR APPLICATION DATA:  
    (A) APPLICATION NUMBER: US 60/005701  
    (B) FILING DATE: 17-OCT-1995

(2) INFORMATION FOR SEQ ID NO: 1:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 60 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

TGCAGCTCGT GTTCTGTACG GTGACGTTAA CGACGACGGT AAAGTTAACT CCACCGACCT 60

(2) INFORMATION FOR SEQ ID NO: 2:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 60 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

GACCCTGCTG AAACGTTACG TTCTGAAAGC TGTTTCCACC CTGCCGTCCT CCAAAGCTGA 60

(2) INFORMATION FOR SEQ ID NO: 3:

- (i) SEQUENCE CHARACTERISTICS:  
    (A) LENGTH: 60 base pairs  
    (B) TYPE: nucleic acid  
    (C) STRANDEDNESS: single  
    (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

AAAAAACGCT GACGTTAACC GTGACGGTCG TGTTAACTCC TCCGACGTTA CCATCCTGTC 60

(2) INFORMATION FOR SEQ ID NO: 4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 41 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

CCGTTACCTG ATCCGTGTTA TCGAAAACT GCCGATCTAA C 41

(2) INFORMATION FOR SEQ ID NO: 5:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

TGCAGTTAGA TCGGCAGTTT TTCGATAACA CGGATCAGGT AACGGGACAG GATGGTAACG 60

(2) INFORMATION FOR SEQ ID NO: 6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

TCGGAGGAGT TAACACGACC GTCACGGTTA ACGTCAGCGT TTTTTCAGC TTTGGAGGAC 60

(2) INFORMATION FOR SEQ ID NO: 7:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 60 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

GGCAGGGTGG AAACAGCTTT CAGAACGTAA CGTTTCAGCA GGGTCAGGTC GGTGGAGTTA 60

(2) INFORMATION FOR SEQ ID NO: 8:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 41 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:

ACTTTACCGT CGTCGTTAAC GTCACCGTAC AGAACACGAG C 41

(2) INFORMATION FOR SEQ ID NO: 9:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 40 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

CATGCAACTC TGCAGCTCGT GTTCTGTACG GTGACGTTAA 40

(2) INFORMATION FOR SEQ ID NO: 10:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 40 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:

TACCAGATCC TGCAGTTAGA TCGGCAGTTT TTCGATAACA

40

(2) INFORMATION FOR SEQ ID NO: 11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

TGCAGCTCGT AAAGTGTACG GTGACGTTAA CGACGACGGT AAAGTTAACT CCACCGACGC

60

(2) INFORMATION FOR SEQ ID NO: 12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

TGTTGCTCTG AAACGTTACG TTCTGCGTTC CGGTATCTCC ATCAACACCG ACAACGCGGA

60

(2) INFORMATION FOR SEQ ID NO: 13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:

CCTGAACGAA GACGGTCGTG TTAACCTCCAC CGACCTGGGT ATCCTGAAAC GTTACATCCT 60

(2) INFORMATION FOR SEQ ID NO: 14:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 35 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:

GAAAGAAATC GACACCCTGC CGTACAAAAA CTAAC 35

(2) INFORMATION FOR SEQ ID NO: 15:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 60 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:

TGCAGTTAGT TTTTGTACGG CAGGGTGTCTG ATTTCTTTCA GGATGTAACG TTTCAGGATA 60

(2) INFORMATION FOR SEQ ID NO: 16:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 60 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:

CCCAGGTCGG TGGAGTTAAC ACGACCGTCT TCGTTCAGGT CCGCGTTGTC GGTGTTGATG 60

(2) INFORMATION FOR SEQ ID NO: 17:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 60 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:

GAGATACCGG AACGCAGAAC GTAACGTTTC AGAGCAACAG CGTCGGTGGA GTTAACTTTA 60

(2) INFORMATION FOR SEQ ID NO: 18:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 35 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:

CCGTCGTCGT TAACGTCACC GTACAGTTTA CGAGC 35

(2) INFORMATION FOR SEQ ID NO: 19:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 40 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:

CATGCATCAC TGCAGCTCGT AAACGTACG GTGACGTTAA 40

(2) INFORMATION FOR SEQ ID NO: 20:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 40 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:

TCAGACCTAC TGCAGTTAGT TTTTGTACGG CAGGGTGTGG

40

(2) INFORMATION FOR SEQ ID NO: 21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 43 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:

CGAGCGCCGC GGGCTTGTTC TGTACGGTGA CGTTAACGAC GAC

43

(2) INFORMATION FOR SEQ ID NO: 22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 43 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:

AGCCAGCCGC GGTTAGATCG GCAGTTTTTC GATAACACGG ATC

43

(2) INFORMATION FOR SEQ ID NO: 23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 43 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 23:

CGAGCGCCGC GGGCTTAAAC TGTACGGTGA CGTTAACGAC GAC

43

(2) INFORMATION FOR SEQ ID NO: 24:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 43 base pairs
- (B) TYPE: nucleic acid



- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 24:

AGCCAGCCGC GGTTAGTTTT TGTACGGCAG GGTGTCGATT TCT

43

(2) INFORMATION FOR SEQ ID NO: 25:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 27 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 25:

GAAATACCTA TACATATGAA AGGAGTG

27

(2) INFORMATION FOR SEQ ID NO: 26:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 25 base pairs
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 26:

TGGATGGTAT ACCACTGAAT CTTAC

25

(2) INFORMATION FOR SEQ ID NO: 27:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 69 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: unknown
  - (D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 27:

Val Leu Tyr Gly Asp Val Asn Asp Asp Gly Lys Val Asn Ser Thr Asp  
 1 5 10 15  
 Leu Thr Leu Leu Lys Arg Tyr Val Leu Lys Ala Val Ser Thr Leu Pro  
 20 25 30  
 Ser Ser Lys Ala Glu Lys Asn Ala Asp Val Asn Arg Asp Gly Arg Val  
 35 40 45  
 Asn Ser Ser Asp Val Thr Ile Leu Ser Arg Tyr Leu Ile Arg Val Ile  
 50 55 60  
 Glu Lys Leu Pro Ile  
 65

(2) INFORMATION FOR SEQ ID NO: 28:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 67 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: unknown
- (D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 28:

Lys Leu Tyr Gly Asp Val Asn Asp Asp Gly Lys Val Asn Ser Thr Asp  
 1 5 10 15  
 Ala Val Ala Leu Lys Arg Tyr Val Leu Arg Ser Gly Ile Ser Ile Asn  
 20 25 30  
 Thr Asp Asn Ala Asp Leu Asn Glu Asp Gly Arg Val Asn Ser Thr Asp  
 35 40 45  
 Leu Gly Ile Leu Lys Arg Tyr Ile Leu Lys Glu Ile Asp Thr Leu Pro  
 50 55 60  
 Tyr Lys Asn  
 65

(2) INFORMATION FOR SEQ ID NO: 29:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: unknown
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 29:

Gly Val Pro Ser Lys Gly Met Ala Asn Cys Asp Phe Val Leu Gly Tyr  
 1 5 10 15  
 Asp Pro Asn Val Leu Glu Val Thr Glu Val Lys Pro Gly Ser Ile Ile  
 20 25 30  
 Lys Asp Pro Asp Pro Ser Lys Ser Phe Asp Ser Ala Ile Tyr Pro Asp  
 35 40 45  
 Arg Lys Met Ile Val Phe Leu Phe Ala Glu Asp Ser Gly Arg Gly Thr  
 50 55 60  
 Tyr Ala Ile Thr Gln Asp Gly Val Phe Ala Thr Ile Val Ala Thr Val  
 65 70 75 80  
 Lys Ser Ala Ala Ala Ala Pro Ile Thr Leu Leu Glu Val Gly Ala Phe  
 85 90 95  
 Ala Asp Asn Asp Leu Val Glu Ile Ser Thr Thr Phe Val Ala Gly Gly  
 100 105 110  
 Val Asn Leu Gly Ser Ser Val Pro Thr Thr Gln Pro Asn Val Pro Ser  
 115 120 125  
 Asp Gly Val Val Val Glu Ile Gly Lys Val Thr Gly Ser Val Gly Thr  
 130 135 140  
 Thr Val Glu Ile Pro Val Tyr Phe Arg Gly Val Pro Ser Lys Gly Ile  
 145 150 155 160  
 Ala Asn Cys Asp Phe Val Phe Arg Tyr Asp Pro Asn Val Leu Glu Ile  
 165 170 175  
 Ile Gly Ile Asp Pro Gly Asp Ile Ile Val Asp Pro Asn Pro Thr Lys  
 180 185 190  
 Ser Phe Asp Thr Ala Ile Tyr Pro Asp Arg Lys Ile Ile Val Phe Leu  
 195 200 205  
 Phe Ala Glu Asp Ser Gly Thr Gly Ala Tyr Ala Ile Thr Lys Asp Gly  
 210 215 220  
 Val Phe Ala Lys Ile Arg Ala Thr Val Lys Ser Ser Ala Pro Gly Tyr  
 225 230 235 240  
 Ile Thr Phe Asp Glu Val Gly Gly Phe Ala Asp Asn Asp Leu Val Glu  
 245 250 255  
 Gln Lys Val Ser Phe Ile Asp Gly Gly Val Asn Val Gly Asn Ala Thr  
 260 265 270  
 Pro Thr Lys Gly Ala Thr Pro Thr Asn Thr Ala Thr Pro Thr Lys Ser  
 275 280 285  
 Ala Thr Ala Thr Pro Thr Arg Pro Ser Val Pro Thr Asn Thr Pro Thr  
 290 295 300

Asn Thr Pro Ala Asn Thr Pro Val Ser Gly Asn Leu Lys Val Glu Phe  
 305 310 315 320  
 Tyr Asn Ser Asn Pro Ser Asp Thr Thr Asn Ser Ile Asn Pro Gln Phe  
 325 330 335  
 Lys Val Thr Asn Thr Gly Ser Ser Ala Ile Asp Leu Ser Lys Leu Thr  
 340 345 350  
 Leu Arg Tyr Tyr Tyr Thr Val Asp Gly Gln Lys Asp Gln Thr Phe Trp  
 355 360 365  
 Cys Asp His Ala Ala Ile Ile Gly Ser Asn Gly Ser Tyr Asn Gly Ile  
 370 375 380  
 Thr Ser Asn Val Lys Gly Thr Phe Val Lys Met Ser Ser Ser Thr Asn  
 385 390 395 400  
 Asn Ala Asp Thr Tyr Leu Glu Ile Ser Phe Thr Gly Gly Thr Leu Glu  
 405 410 415  
 Pro Gly Ala His Val Gln Ile Gln Gly Arg Phe Ala Lys Asn Asp Trp  
 420 425 430  
 Ser Asn Tyr Thr Gln Ser Asn Asp Tyr Ser Phe Lys Ser Ala Ser Gln  
 435 440 445  
 Phe Val Glu Trp Asp Gln Val Thr Ala Tyr Leu Asn Gly Val Leu Val  
 450 455 460  
 Trp Gly Lys Glu Pro Gly Gly Ser Val Val Pro Ser Thr Gln Pro Val  
 465 470 475 480  
 Thr Thr Pro Pro Ala Thr Thr Lys Pro Pro Ala Thr Thr Lys Pro Pro  
 485 490 495  
 Ala Thr Thr Ile Pro Pro Ser Asp Asp Pro Asn Ala Ile Lys Ile Lys  
 500 505 510  
 Val Asp Thr Val Asn Ala Lys Pro Gly Asp Thr Val Asn Ile Pro Val  
 515 520 525  
 Arg Phe Ser  
 530